In the Claims:

1. (Currently Amended) An imaging assembly comprising:

an x-ray source;

a controller in communication with said x-ray source;

a detector assembly in communication with said controller, said detector assembly comprising:

a detector array in communication with said controller;

a scintillator assembly positioned between said ~~photo~~ detector array and said x-ray source;

a collimator assembly positioned in between said scintillator assembly and said x-ray source; and

an electroluminescent panel in communication with said scintillator assembly, said electroluminescent panel in communication with said controller, said electroluminescent panel having an active condition wherein said electroluminescent panel generates radiation eliciting a response from said detector array, said electroluminescent panel generating radiation without receiving x-rays.

2. (Original) An imaging assembly as described in claim 1, further comprising:

a reflector film in communication with said electroluminescent panel, said reflector film positioned between said electroluminescent panel and said scintillator, said reflector film allowing said radiation to pass through while reflecting light generated by said scintillator assembly.

3. (Original) An imaging assembly as described in claim 2, wherein said reflector film comprises dielectric reflector film allowing said radiation to pass into said scintillator, said dielectric reflector film preventing said radiation from passing out of said scintillator.

4. (Original) An imaging assembly as described in claim 1, wherein said electroluminescent panel generates non-exciting radiation.

5. (Original) An imaging assembly as described in claim 1, wherein said electroluminescent panel generates exciting radiation.

6. (Original) An imaging assembly as described in claim 1, wherein said controller comprises:

a logic adapted to:

generate said radiation using said electroluminescent panel;

receive said response from said detector array; and

diagnose said detector assembly using said response.

7. (Original) An imaging assembly as described in claim 1, wherein said controller comprises:

a logic adapted to:

generate said radiation using said electroluminescent panel;

receive said response from saiddetector array; and

calibrate said detector assembly using said response.

8. (Original) An imaging assembly as described in claim 1, wherein said controller comprises:

a logic adapted to:

generate said radiation using said electroluminescent panel;

receive said response from said detector array; and

monitor said detector assembly using said response.

9. (Currently Amended) An imaging assembly as described in claim 1, wherein said controller comprises:

a logic adapted to:

test only a portion of said detector assembly by way of eliciting a response from only a portion said detector array.

10. (Original) An imaging assembly as described in claim 9, wherein said portion comprises a selected cell.

11. (Original) An imaging assembly as described in claim 2, wherein said dielectric reflector film comprises a multi-layer band pass film.

12. (Original) An imaging assembly as described in claim 2, wherein said dielectric reflector film comprises a one-way mirror film.

13. (Original) An imaging detector assembly comprising:

a controller:

a detector assembly in communication with said controller, said detector assembly comprising:

a photodetector array in communication with said controller;

a collimator assembly;

a scintillator assembly; positioned between said photodetector array and said collimator assembly; and

an electroluminescent panel positioned between said collimator assembly and said scintillator assembly, said electroluminescent panel in communication with said controller, said electroluminescent panel having an active condition wherein said electroluminescent panel generates radiation eliciting a response from said detector array, said electroluminescent panel generating radiation without receiving x-rays.

14. (Original) An imaging assembly as described in claim 13, further comprising:

a reflector film in communication with said electroluminescent panel, said reflector film positioned between said electroluminescent panel and said scintillator, said reflector film allowing said radiation to pass through while reflecting light generated by said scintillator assembly.

15. (Original) An imaging detector assembly as described in claim 13, wherein said electroluminescent panel comprises:

a first conductive film;

a second conductive film; and

a electro luminescent film between said first conductive film and said second conductive film.

16. (Currently Amended) An imaging detector assembly as described in claim ~~13~~ 15, wherein said first conductive film comprises a transparent conductor.

17. (Currently Amended) An imaging detector assembly as described in claim ~~13~~ 15, wherein said first conductive film comprises a metallic conductor.

18. (Currently Amended) A method of testing an imaging detector assembly comprising:

generating radiation from an electroluminescent panel positioned in ~~communication~~ contact with a scintillator assembly, said radiation exciting said scintillator assembly;

receiving a response signal from a detector array, said response signal generated by said detector array in response to said radiation; and

evaluating the imaging detector assembly using said response signal.

19. (Original) A method of testing an imaging detector assembly as described in claim 18, wherein said evaluating said imaging detector assembly comprises:

diagnosing said imaging detector assembly.

20. (Original) A method of testing an imaging detector assembly as described in claim 18, wherein said evaluating said imaging detector assembly comprises:

calibrating said imaging detector assembly.

21. (Currently Amended) A method of testing an imaging detector assembly as described in claim 18, further comprising:

activating said electroluminescent panel from a ~~remote~~ off-site location; and

evaluating said imaging detector assembly from said ~~remote~~ off-site location.

Oath/Declaration

The oath/declaration of each inventor was objected to for failing to include their zip codes. The mailing address is provided in an application data sheet.

Drawings

The drawings were objected to for failing to include item numbers 29, 30, and 32 in Figure 2. An replacement figure sheet has been submitted which includes item numbers 29 and 32 (item 30 was present). The Applicant submits this objection has now been overcome.

The drawings were objected to because the numbering of items in the Figures skips from item 30 to item 32 without assigning 31 to an item. The Applicant respectfully traverses this objection. Landis on the Mechanics of Claim Drafting, in addition to common practice, suggests the use of even numbering schemes for items such that items may be inserted during further drafts or amendments while retaining a generally incremental numbering scheme. Henceforth, it is standard patent practice to skip from item 30 to item 32 without using 31. If the Applicant has misunderstood the objection, appropriate corrections will of course be made upon clarification.

The drawings were objected to for failure to show a flow-chart of computer logic in claims 6-10. New drawings have been added to bring this into compliance along with an amendment to the specification accordingly.

Specification

The Specification has been amended to include a discussion of the logic of claims 6-10 and the method claims 18-21 as suggested.

Claim Rejections

Claim 1 was rejected under 35 USC 112, second paragraph for an insufficient antecedent basis. Claims 18-20 were rejected under 35 USC 102(b) as being anticipated by Auphin (US 4,047,034). Claims 1,5,13 and 15-17 were rejected under 35 USC 103(a) as being unpatentable over Okumura (US 6,658,082) in view of Brabec (2004/0113088 A1). Claims 6-8 were rejected under 35 USC 103(a) as being

unpatentable over Okumura in view of Brabec, in further view of Nelson et al (US 6,693,291). Claims 9 and 10 were rejected under 35 USC 103(a) as being unpatenable over Okumura in view of Brabec in further vie of Mliner et al (USPGPUB 2005/0111613). Claim 4 was rejected under 35 USC 103(a) as unpatenable over Okumura in view of Brabec in further view of Auphin. Claim 21 was rejected under 35 USC 103(a) as being unpatenable over Auphin in view of Manian (US 5,565,678).

Claim 1 was rejected under 35 USC 112

Claim 1 was rejected under 35 USC 112, second paragraph for an insufficient antecedent basis. The term "photodector array" had no antecedent basis. The claim has been amended to remove this rejection.

Claims 18-20 were rejected under 35 USC 102(b)

Claims 18-20 were rejected under 35 USC 102(b) as being anticipated by Auphin (US 4,047,034). The Applicant respectfully traverses this rejection and requests reconsideration in light of the amendments provided and the following arguments. Auphin teaches routing light from a light source (8) through light pipes (7) into photomultipliers P9,P17,P19, etc. for the purpose of calibrating the photomultipliers. The present invention, however is directed (and claims) to a method using a electroluminescent panel directly in contact with the scintillator to diagnose or calibrate the detector array. The present claims are also directed towards a method wherein the electroluminescent panel is used to excite the scintillator which in turn then generates a signal in the detector array. The Auphin reference fails to teach this method. It simply ports light directly into a photomultiplier. By using a panel in direct contact and activating the scintillator, the present inventions method allows it to be utilized on compact imaging systems where the patient is still in place during diagnosis/calibration. Furthermore, it is a method that evaluates the detector assembly as a whole rather than simply a given photomultiplier. This allows companion scintillator/detector array elements to be diagnosed as a single element which in turn allows for an improved calibration/diagnosis of the end result.

Claims 1, 5, 13 and 15-17 were rejected under 35 USC 103(a)

Claims 1,5,13 and 15-17 were rejected under 35 USC 103(a) as being unpatentable over Okumura (US 6,658,082) in view of Brabec (2004/0113088 A1). The Applicant respectfully traverses this rejection. The rejection is primarily based on the assertion that Brabec teaches the use of the electroluminescent panel as claimed by the present invention. This is inaccurate. The Brabec reference teaches the use of a phosphorus layer that is excited by the impact of X-ray radiation. The entire purpose of the present claimed invention is the ability to activate the detector array WITHOUT the need for x-rays. Neither cited reference teaches an electroluminescent panel generating radiation. They, instead, discuss a phosphorus layer that generates light IN RESPONSE to radiation. Therefore, the Applicant respectfully traverses this rejection. The Applicant has respectfully amended the claims to remove any confusion and to bring the claims into direct compliance with paragraph 18 of the specification as filed.

Claims 6-8 were rejected under 35 USC 103(a)

Claims 6-8 were rejected under 35 USC 103(a) as being unpatentable over Okumura in view of Brabec, in further view of Nelson et al (US 6,693,291). The Applicant respectfully traverses this rejection. The Applicant incorporates the traversal of the underlying Okumura and Brabec combination as discussed above. In addition, the Applicant traverses the Nelson combination with regards to claims 6-8. Nelso teaches in the cited portion, only the use of a computer to select and orientate several different collimators. This does not teach any of the elements claimed in Claims 6-8. It fails to teach calibration or diagnosing using detector responses generated by electroluminescent panel radiation. None of the cited references, either alone or in combination teach these limitations and therefore are not sufficient to find rejection.

Claims 9 and 10 were rejected under 35 USC 103(a)

Claims 9 and 10 were rejected under 35 USC 103(a) as being unpatenable over Okumura in view of Brabec in further vie of Mliner et al (USPGPUB 2005/0111613).

Again, the Applicant traverses based on the fundamental underlying insufficiencies of the Okumura and Brabec references. In addition, the Applicant notes that the inventors on the Mliner et al reference are under an obligation to assign to General Electric and therefore it is not properly used as prior art. The Applicant requests the Examiner check for a filed assignment on this reference which will confirm the obligation. In addition, however, the applicant notes a significant confusion. The claim was intended to be directed towards only activating a single cell or portion of the detector to test, not simply bombarding it and only reading the output from once cell. While the specification is very clear on this, the Applicant understands how the claims may be have been read overly broad on this note. The Applicant has therefore clarified the claims in accordance with the specification. The Applicant asserts the rejection has now been overcome.

Claim 4 was rejected under 35 USC 103(a)

Claim 4 was rejected under 35 USC 103(a) as unpatenable over Okumura in view of Brabec in further view of Auphin. The Applicant respectfully incorporates the above traversal of the underlying rejections. The Applicant further respectfully traverses the argument the a electroluminescent diode attached to detectors by way of light pipes (Auphin) is the equivalent of the claimed electroluminescent panel claimed. The present invention claims a panel that may be applied directly to the scintilator and therefore acts 1) as a protector to the scintillator and 2) may be positioned in line between the patient and scnintillator without interference. The resultant structure in unique and is not taught by the cited references either alone or in combination.

Claim 21 was rejected under 35 USC 103(a)

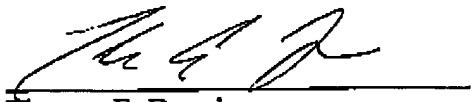
Claim 21 was rejected under 35 USC 103(a) as being unpatenable over Auphin in view of Manian (US 5,565,678). The Applicant again reasserts the underlying traversal of the Auphin reference and further incorporates the argument that Manian fails to teach the activation from an off-site. As noted by the Examiner, the activation of existing equipment is in a sense "remote" in that you don't want the technicians

exposed. However, it (as discussed in the specification) is not something that you want controlled off-site (again due to the danger of x-ray exposure). The present invention, unlike any of the cited reference either alone or in combination, teaches remote activation of an electroluminescent panel that functions without x-rays. It is precisely this x-ray less operation that allows off-site activation to be preformed safely. This is not taught by any of the cited references either alone or in combination and should therefore be allowed.

With this response, it is respectfully submitted that all rejections and objections of record have been overcome and that the case is in condition for allowance.

Should the Examiner have any questions or comments, he is respectfully requested to contact the undersigned.

Respectfully submitted,



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